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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jay A. Haines

Title: INFRARED REFLECTIVE WALL PAINT

Appl. No.: 10/811,065

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Examiner: Alain Bashore

Art Unit: 1762

Conf. No.: 8080

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below.	
<u>Vanessa E. Agra</u> (Printed Name)	
<u>Vanessa E. Agra</u> (Signature)	
<u>August 24 2006</u> (Date of Deposit)	

DECLARATION OF JULIE K. MOWERY UNDER 37 C.F.R. 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Julie K. Mowery, being duly warned, hereby declare as follows:

1. I am a Certified Public Account serving as Chief Financial Officer of Textured Coatings of America, Inc., 2422 East 15th Street, Panama City, FL 32405, which position I have held since 2002. Prior to joining Textured Coatings of America, Inc. I worked in public accounting for 13 years. I am familiar with the products sold by Textured Coatings of America, Inc., the historic and current costs and revenues associated with these products, and sales and revenues of related products of the architectural coatings industry in the United States.
2. Textured Coatings of America, Inc. manufactures the paints disclosed in the above-referenced patent application with brand name Supercote™. In this declaration, the term "Supercote IR" refers to Supercote™ paint having the infrared (IR) reflective pigments described in the application, which pigments comprise a solid solution having a corundum-hematite crystal

lattice structure. The term "Supercote Non-IR" refers to Supercote™ paint which does not contain the infrared reflective pigment of the application.

3. I have analyzed the sales and pricing of Textured Coatings of America, Inc. related to Supercote™ in the time period 2000 through 2006. This analysis is provided as Exhibit 1. A summary of the analysis of Exhibit 1 is provided below:

Year	Supercote Sales (Thousand \$)			Sales Growth Supercote IR (%)	Supercote Price (\$)		TexCote Sales (Thousand \$)
	Non-IR	IR	Total		Non-IR	IR	
2000	148.94		148.94		18.95		13,418.68
2001	139.93		139.93		18.95		12,752.78
2002	568.42		568.42		18.95		11,536.82
2003	295.69	1,312.99	1,608.68	183.0	18.95	24.95	13,527.71
2004		2,800.43	2,800.43	392.7		29.95	14,629.64
2005		3,240.09	3,240.09	470.0		30.95	15,393.21
2006		4,212.67	4,212.67	641.3		34.95	16,794.98

4. In the table above, the column entitled "Supercote Sales" provides sales data (i.e., total annual sales) for the period 2000-2006 for both Supercote Non-IR and Supercote IR. The term "Non-IR" refers to sales of Supercote Non-IR. The term "IR" refers to sales of Supercote IR. The "Total" column provides the sum of Supercote Non-IR and Supercote IR sales. Supercote IR was introduced in 2003, and at that time Textured Coatings of America, Inc. discontinued the sale of Supercote Non-IR, except for the sale of product to complete ongoing projects. Accordingly, all sales of Supercote™ subsequent to the introduction of Supercote IR in 2003 should be considered Supercote IR sales. Thus, the columns labeled "Non-IR" and "IR" represent sales prior and subsequent to the introduction of Supercote IR. The column labeled "Sales Growth" represents the annual growth in sales of Supercote™ with respect to sales in 2002. The term "Supercote Price" refers to the manufacturer's suggested retail price per gallon for Supercote Non-IR and Supercote IR. Sales data for 2006 have been annualized based on

actual sales through June, 2006. The term "Texcote Sales" refers to total sales of Textured Coatings of America, Inc. All sales values are in thousands of dollars.

5. As shown in the table above, sales of Supercote™ increased by 2,729% in the period 2000-2006. In particular, sales of Supercote™ increased by 470% in the period 2002-2005, which period represents the time from the last full year in which Supercote Non-IR was marketed to the most recent full year (i.e., Supercote IR sales). Furthermore, sales of Supercote™ increased by 641.3% in the period 2002-2006, whereas total sales of Textured Coatings of America, Inc. increased by 45.6% (i.e., from \$11.536 million in 2002 to \$16.795 million in 2006).

6. The introduction of Supercote IR was accompanied by a pricing increase, from \$18.95/gal for Supercote Non-IR to \$24.95/gal for Supercote IR in 2003. In the period 2003-2006, pricing for Supercote IR increased from \$24.95/gal to \$34.95/gal; i.e., 40.0% increase in price. During the same 2003-2006 period, sales of Supercote™ have increased 261.9% (i.e., from \$1.608 million in 2003 to \$4.214 million in 2006).

7. I have analyzed the total amount (gallons) of Supercote™ paint sold by Textured Coatings of America, Inc. in the period 2000-2006. A summary of these data is provided in the Table following:

Year	Supercote Total Sold (Gallons)
2000	14,541
2001	18,060
2002	26,886
2003	53,358
2004	77,448
2005	92,080
2006	113,234

8. In the table above, the term "Supercote Total Sold (Gallons)" refers to total number of gallons of Supercote™, including both Supercote Non-IR and Supercote IR, sold in the year. The figure for 2006 has been annualized. Supercote™ total gallons sold increased approximately 98.5% in 2003 over 2002, which increase in unit sales was the result of the introduction of Supercote IR in 2003. Furthermore, Supercote™ total gallons sold has increased 678.7% in the period 2000-2006, and 112.2% in the period 2003-2006, i.e., since the introduction of Supercote IR in 2003.

9. In order to establish annual values of the U.S. market for exterior water-type architectural coatings, which market encompasses the Supercote™ brand, I have relied on data provided by the Economics and Statistics Administration of the U.S. Census Bureau; i.e., reports MA325F(02)-1, MA325F(03)-1, MA325F(04)-1, and MA325F(05)-1 for the period 2002-2005, respectively. Data for 2001 are also provided in the report for 2002, and have been used herein. Copies of these reports are provided herewith as Exhibits 2-5, respectively. A summary of these data is provided in the following table:

Year	Exterior water-type coatings (Million \$)	TCA Sales (Million \$)	TCA Sales (%)	Supercote Sales (Million \$)	Supercote Sales (%)
2001	1,369.898	12.752	0.931	0.140	0.010
2002	1,296.921	11.537	0.889	0.568	0.044
2003	1,295.764	13.528	1.044	1.609	0.124
2004	1,414.222	14.630	1.034	2.800	0.198
2005	1,418.266	15.393	1.085	3.240	0.228

10. In the table above, the term "Exterior water-type coating" refers to Produce code 3255101131 (Table 2) of Exhibits 2-5, which term reflect the total sales of all "Water thinned paints and tinting bases, including barn and roof paints" which are of the exterior water-type of architectural paints. See Exhibits 2-5. The term "TCA Sales" refers to the total sales of Textured Coatings of America, Inc. The term "TCA Sales (%)" refers to the ratio of TCA Sales to exterior water-type coatings sales, expressed as a percentage. The term "Supercote Sales" refers to sales

of the Supercote™ brand by Textured Coatings of America, Inc. The term “Supercote Sales (%)” refers to the ratio of Supercote Sales to exterior water-type coatings sales, expressed as a percentage. All values, except percentages, are in millions of dollars.

11. In the period 2002-2005, the total U.S. market for exterior water-type architectural paints experienced an increase of 9.36% (i.e., from \$1,297 million to \$1,418 million). As described in Item 5 above, during this time period sales of Supercote™ experienced a 470% increase.

12. I have analyzed the advertising and sales aid costs of Textured Coatings of America, Inc. in the time period 2000 through 2006. This analysis is provided as Exhibit 6. A summary of the analysis of Exhibit 6 is provided below:

Year	General Advertising (\$)	Sales Aids (\$)	Total Advertising and Sales Aids (\$)
2000	89,296.27	108,736.57	198,032.84
2001	67,686.03	129,287.75	196,973.78
2002	62,877.51	128,853.03	191,730.54
2003	48,495.74	210,365.03	258,860.77
2004	45,961.36	292,335.93	338,297.29
2005	31,019.60	158,784.82	189,804.42
2006	23,735.12	191,944.28	215,679.40

13. In the table above, the term “General Advertising” refers to expenses related to traditional advertising such as publicity firms, ads in various publications, mass mailings, website design, and the like. The term “Sales Aids” refers to expenses related to creating and distributing sales aids to dealers, architects, contractors, and other interested buyers. The term “Total Advertising and Sales Aids” refers to the sum of General Advertising and Sales Aids. Figures for 2006 are annualized.

14. Regarding sales aids, Textured Coatings of America, Inc. has created a unique set of sales aids for both the commercial and home improvement divisions. Regarding commercial sales

aids, these include a sophisticated commercial binder containing product information, samples, brochures, and application guides.

15. Importantly, the binder described in Item 14 was developed and produced during the period 2003-2004 which is reflected in the increase in sales aid expenses during this period. The only information contained in the binder regarding Supercote IR is a technical data sheet describing the product. No Supercote IR brochures or samples have been included in the binder. Furthermore, as shown in the table above, the cost of developing and producing the commercial sales aid binder was incurred only in 2003-2004. Indeed, sales aids expenses decreased 45.7% in 2005 relative to expenses in 2004 (i.e., \$158,784.82 in 2005 compared with \$210,365.03 in 2004), which decrease is attributable to decreased expense due to the end of development and production of the binder. Furthermore, total advertising and sales aid expenses in 2005 actually decreased relative to 2002 expenses (i.e., \$189,804.42 in 2005 compared with \$191,730.54 in 2002).

16. Regarding home improvement sales aids, these include sales kits, pitch books, brochures, and demonstration equipment. None of these home improvement sales aids are produced specifically for Supercote IR customers.

17. Regarding Supercote IR marketing, the amount spent on the Supercote IR line of products since its introduction and through the period 2003-2006 is consistent with the advertising and sales aid expenditures on other products of Textured Coatings of America, Inc.

18. During 2004-2006, Textured Coatings of America, Inc. instituted a new program for home improvement dealers which gave them an allowance to purchase sales aids based on a percentage of prior year sales. The result of this program was to convert sales aids from a marketing tool into a commodity that dealers could purchase to market their services to homeowners. This shift in emphasis demonstrates that the development of sales aids did not create the Supercote IR market, but is instead a response to increased sales and dealer demand.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements are so made punishable by fine or imprisonment, or both, under Section 101 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

8/22/06

Date

Julie K. Mowery
Julie K. Mowery

Attachments:

- Exhibit 1: Sales figures, Textured Coatings of America, Inc., 2000-2006.
- Exhibits 2-5: U.S. Census Bureau economic reports "Paints and Allied Products" for 2002-2005, respectively..
- Exhibit 6: Advertising and sales aids expenses, Textured Coatings of America, Inc., 2000-2006.

Exhibit 1: Sales figures, Textured Coatings of America, Inc., 2000-2006.

Textured Coatings of America, Inc
Supercote IR vs. Non-IR Sales, Pricing, & Cost Analysis
2000 - 2006 (Annualized)

	2000 Total	2001 Total	2002 Total	2003 Total	2004 Total	2005 Total	2006 Total Annualized
Total Sales:	13,418,683.47	12,752,870.10	11,536,815.50	13,527,712.29	14,629,643.00	15,393,208.58	16,794,975.82
Supercote Sales:							
<i>Non-IR Supercote Sales</i>	148,939.00	139,933.60	568,421.24	295,686.54			
<i>IR Supercote Sales</i>				1,312,989.50	2,800,427.38	3,240,090.00	4,212,667.60
Total	148,939.00	139,933.60	568,421.24	1,608,676.04	2,800,427.38	3,240,090.00	4,212,667.60
Supercote Sales Growth: <i>(Relative to 2002)</i>				183.01%	392.70%	470.00%	641.30%
Pricing:							
<i>Pricing Supercote Non-IR</i>	18.95	18.95	18.95	18.95	19.95	20.95	22.45
<i>Pricing Supercote IR</i>				24.95	29.95	30.95	34.95

Exhibits 2-5: U.S. Census Bureau economic reports MA325F(02)-1, MA325F(03)-1, MA325F(04)-1, and MA325F(05)-1, “Paints and Allied Products” for 2002-2005, respectively.

Paint and Allied Products: 2002

Issued July 2003

MA325F(02)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>.

Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2002, total manufacturers' estimated shipments of paint and

allied products amounted to \$17,210.4 million, virtually unchanged from the 2001 shipments of \$17,274.7 million. Shipments of architectural coatings increased 1.2 percent to \$7,123.1 million in 2002, from \$7,038.3 million in 2001. Shipments of OEM coatings amounted to \$5,548.2 million in 2002, virtually unchanged from the 2001 shipments of \$5,566.6. Shipments of special-purpose coatings decreased 1.7 percent to \$3,351.5 million in 2002, from \$3,408.1 million in 2001. Shipments of miscellaneous allied paint products decreased 5.9 percent to \$1,187.6 million in 2002, from \$1,261.7 million in 2001.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Thanos Theodoropoulos, 301-763-1606.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

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Table 1. Summary of Estimated U.S. Total Quantity and Value of Shipments of Paint and Allied Products: 1997 to 2002
 [Quantity in millions of gallons. Value in millions of dollars]

Year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		Miscellaneous allied paint products		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2002.....	1,463.0	17,210.4	718.7	7,123.1	412.0	5,548.2	183.0	3,351.5	149.3	1,187.6	
2001.....	1,392.9	17,274.7	r/	667.0	7,038.3	406.5	5,566.6	161.2	3,408.1	158.2	1,261.7
2000.....	1,467.2	17,724.7	650.6	6,461.4	453.4	6,149.2	182.4	3,607.0	180.8	1,507.1	
1999.....	1,466.2	17,813.4	660.2	6,617.9	439.7	6,146.3	174.4	3,532.3	191.9	1,516.9	
1998.....	1,443.7	17,298.2	631.6	6,115.2	428.3	6,098.2	173.3	3,472.0	210.5	1,612.8	
1997.....	1,472.8	16,559.5	655.6	6,264.9	425.4	5,750.7	181.8	2,896.0	210.0	1,647.9	

r/Revised by 5 percent or more from previously published data.

Note: Data for 1997 through 2002 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These factors are: 1.002 for "Architectural coatings," .993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous allied paint products." For example: the quantity and value of OEM coatings for 2002 shown in Table 2 amounted to 414,943 and \$5,587,296, respectively. Adjusting these data by the factor of .993 (multiplying 414,943 and 5,587,296 by .993) equals the adjusted and rounded quantity and value of 412.0 and \$5,548.2 shown in Table 1. For 1997, the adjustment factors are: 1.008 for "Architectural coatings," 0.989 for "Product coatings OEM," 1.011 for "Special-purpose coatings," and 1.026 for "Miscellaneous allied paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510, formerly SIC 2851). The adjustment factors (based on the 1997 Census of Manufactures' relationships) bring each product class value up to 100 percent. Quarterly data for 2002 and 2001 reflect the adjusted totals in Table 1 and are shown in Table 3 along with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2002 and 2001
 [Quantity In thousand of gallons. Value in thousand of dollars]

Product code	Product description	2002		2001	
		Quantity	Value	Quantity	Value
325510	Paint and allied products 1/.....	1,448,755	17,018,272	1,379,399	17,076,636
3255101	Architectural coatings.....	717,230	7,108,866	r/	665,705
	Exterior solvent-type.....	70,967	820,186		64,418
3255101111	Solvent thinned paints and tinting bases, including barn and roof paints.....	19,874	227,580	18,513	213,751
3255101115	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels.....	11,444	155,325	r/	11,847
3255101119	Solvent thinned undercoaters and primers.....	9,184	109,350		8,118
3255101121	Solvent thinned clear finishes and sealers.....	5,701	69,670	r/	5,147
3255101125	Solvent thinned stains, including shingle and shake.....	14,665	176,449	r/	13,020
3255101129	Other exterior solvent thinned coatings, including bituminous paints.....	10,099	81,812		7,773
	Exterior water-type.....	182,423	1,863,503	r/	172,253
3255101131	Water thinned paints and tinting bases, including barn and roof paints.....	118,492	1,296,921	r/	115,147
3255101135	Water thinned exterior-interior deck and floor enamels.....	4,186	38,948	r/	3,960
3255101139	Water thinned undercoaters and primers.....	13,786	145,495	r/	11,791
3255101141	Water thinned stains and sealers.....	16,773	158,898	r/	15,817
3255101145	Other exterior water thinned coatings.....	29,186	223,241		25,538
	Interior solvent-type.....	48,947	583,634		43,897
3255101211	Flat solvent thinned wall paint and tinting bases, including mill white paints.....	6,288	98,147	r/	2,927
3255101215	Gloss and quick drying enamels and other gloss solvent thinned paints and enamels.....	4,164	66,886	r/	3,638
3255101219	Semigloss, eggshell, satin solvent thinned paints, and tinting bases.....	9,674	125,579		10,668
3255101221	Solvent thinned undercoaters and primers.....	11,602	118,972		11,168
3255101225	Solvent thinned clear finishes and sealers.....	7,429	91,865		7,510
3255101229	Solvent thinned stains.....	1,892	18,536		1,936
3255101231	Other interior solvent thinned coatings.....	7,898	63,649		6,050
	Interior water-type.....	407,104	3,762,439	r/	378,136
3255101235	Flat water thinned paints and tinting bases.....	162,810	1,298,859	r/	152,060
3255101239	Semigloss, eggshell, satin, and other water thinned paints and tinting bases.....	164,419	1,675,411	r/	154,668
3255101241	Water thinned undercoaters and primers.....	43,051	336,487	r/	37,818
3255101245	Other interior water thinned coatings, stains, and sealers.....	36,824	451,682		33,590
3255101249	Architectural lacquers.....	5,808	55,698		5,167
3255101YWW	Architectural coatings, n.s.k.	1,981	23,406		1,834
3255104	Product finishes for original equipment manufacturers (OEM), excluding marine coatings.....	414,943	5,587,296		409,326
3255104111	Automobile, light truck, van, and sport utility vehicle finishes.....	47,994	1,069,435		44,434
3255104121	Automobile parts finishes.....	5,636	157,997	r/	5,111
3255104131	Heavy duty truck, bus, and recreational vehicle finishes.....	12,481	298,665		12,064
3255104141	Other transportation equipment finishes, including aircraft and railroad.....	11,558	161,933		12,473
3255104211	Appliance, heating equipment, and air-conditioner finishes.....	7,329	86,341		7,963
3255104215	Wood furniture, cabinet, and fixture finishes.....	43,725	463,771		42,503
3255104219	Wood and composition board flat stock finishes.....	10,060	104,387		11,287
3255104221	Metal building product finishes, including coatings for aluminum extrusions and siding.....	35,855	543,635		36,831
3255104225	Container and closure finishes.....	43,393	453,281		38,583
3255104229	Machinery and equipment finishes, including road building equipment and farm implements.....	18,865	461,740		19,567
3255104231	Nonwood furniture and fixture finishes, including business equipment finishes.....	38,842	413,894		56,109
3255104235	Paper, paper board, film, and foil finishes, excluding pigment binders.....	14,241	119,927	r/	14,437
3255104239	Electrical insulating coatings.....	4,447	32,295		1,898
	Powder coatings.....	77,567	764,855		61,534
3255104241	Appliance powder coatings 2/.....	11,889	165,869		9,509
3255104245	Automotive powder coatings 2/.....	8,903	103,643		8,098
3255104249	Architectural powder coatings (such as aluminum extrusions) 2/.....	2,062	19,403		1,671
3255104251	Lawn and garden powder coatings 2/.....	2,434	23,194		1,902
3255104255	General metal finishing powder coatings 2/.....	22,203	283,636		20,660
					288,464

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2002 and 2001
 [Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2002		2001	
		Quantity	Value	Quantity	Value
3255104259	Thermoset functional powder coatings (for pipe, rebar, electrical insulation, etc.) 2/.....	(D)	(D)	(D)	(D)
3255104261	Thermoplastic powder coatings (all) 2/.....	(D)	(D)	(D)	(D)
3255104265	Other industrial product finishes.....	38,485	399,391	39,793	368,162
3255104YWV	Product finishes for original equipment manufacturers (OEM), excluding marine coatings, n.s.k.	4,465	55,749 r/	4,739	43,994
3255107	Special-purpose coatings, including all marine coatings..... Industrial new construction and maintenance paints (especially formulated coatings for special conditions of industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):	174,114	3,188,857	153,375	3,242,694
3255107111	Interior.....	23,370	227,343	14,760	212,382
3255107115	Exterior.....	34,207	558,831	28,384	541,574
3255107121	Traffic marking paints (all types; shelf goods and highway department).....	39,397	240,644	37,403	280,453
3255107131	Automotive, other transportation and machinery refinishing paints and enamels, including primers.....	45,979	1,632,501	42,451	1,671,812
3255107141	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinishing and maintenance, excludes spar varnish.....	13,565	253,207 r/	12,854	276,873
3255107151	Marine paints for yacht and pleasure craft, new construction, refinishing, and maintenance.....	(D)	(D)	(D)	(D)
3255107161	Aerosol-paint concentrates produced for packaging in aerosol containers.....	(D)	(D)	(D)	(D)
3255107YWV	Special-purpose coatings, n.s.k.	4,233	60,869	3,982	58,408
325510A	Miscellaneous allied paint products.....	142,468	1,133,253	150,993	1,203,890
325510A111	Paint and varnish removers.....	6,433	59,630 r/	7,016	61,549
325510A121	Thinner for lacquers and other solvent based paint products..	31,386	153,264	32,757	166,720
325510A131	Pigment dispersions.....	25,151	385,701	24,143	364,958
325510A141	Other miscellaneous allied paint products, including brush cleaners, ink vehicles, putty and glazing compounds, etc.	78,512	500,221 r/	85,950 r/	577,259
325510AYWV	Miscellaneous allied paint products, n.s.k.	986	34,437	1,127	33,404

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind.
 r/Revised by 5 percent or more from previously published data.

1/Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 1997 Economic Census, Manufacturing sector's final report.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon). Data collected in pounds amounted to 387,835 thousand pounds in 2002 and 307,670 thousand pounds in 2001.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2002 and 2001
 [Quantity in thousands of gallons. Value in thousands of dollars]

Quarter and year	As revised							
	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2002								
Total.....	1,313,696	16,022,757	718,664	7,123,083	412,038	5,548,184	182,994	3,351,490
Fourth quarter.....	297,509	3,600,709	157,525	1,531,123	103,466	1,362,893	36,518	706,693
Third quarter.....	348,625	4,251,368	189,790	1,913,904	106,667	1,419,680	52,168	917,784
Second quarter.....	366,240	4,440,745	204,075	2,036,067	106,667	1,448,653	55,498	956,025
First quarter.....	301,322	3,729,935	167,274	1,641,989	95,238	1,316,958	38,810	770,988
2001								
Total.....	1,234,694	16,012,931	667,036	7,038,303	406,461	5,566,557	161,197	3,408,071
Fourth quarter.....	282,566	3,722,517	154,662	1,663,365	94,593	1,310,024	33,311	749,128
Third quarter.....	320,954	4,172,772	175,752	1,868,950	99,571	1,378,972	45,631	924,850
Second quarter.....	345,755	4,428,762	188,981	1,988,244	108,230	1,466,992	48,544	973,526
First quarter.....	285,419	3,688,880	147,641	1,517,744	104,067	1,410,569	33,711	760,567
As published								
Quarter and year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2002								
Total.....	1,247,612	16,360,897	677,667	7,190,977	413,920	5,844,207	156,025	3,325,713
Fourth quarter.....	283,614	3,682,585	148,539	1,545,717	103,939	1,435,610	31,136	701,258
Third quarter.....	330,597	4,338,298	178,963	1,932,146	107,154	1,495,427	44,480	910,725
Second quarter.....	346,906	4,530,092	192,433	2,055,474	107,154	1,525,946	47,319	948,672
First quarter.....	286,495	3,809,922	157,732	1,657,640	95,673	1,387,224	33,090	765,058
2001								
Total.....	1,187,214	15,717,539	618,436	6,744,304	407,034	5,560,939	161,744	3,412,296
Fourth quarter.....	271,543	3,652,643	143,393	1,593,884	94,726	1,308,702	33,424	750,057
Third quarter.....	308,445	4,094,458	162,947	1,790,881	99,712	1,377,581	45,786	925,996
Second quarter.....	332,303	4,345,437	175,212	1,905,193	108,382	1,465,511	48,709	974,733
First quarter.....	274,923	3,625,001	136,884	1,454,346	104,214	1,409,145	33,825	761,510

See note at end of Table 1.

Table 4. Value of Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2002 and 2001
 [Value in millions of dollars]

Product code	Product description	Manufacturers' shipments	Exports of domestic merchandise 1/	Percent exports to manufacturers' shipments		Imports for consumption 2/ 3/	Apparent consumption 4/
				Exports to manufacturers' shipments	Percent exports to manufacturers' shipments		
3255101100, 4100, 7100	Paint, varnish, and lacquer.....	16,022.8	1,082.3	6.8	416.2	15,356.7	
	2002.....	16,013.0	1,042.9	6.5	438.4	15,408.5	
325510A111, A121	Paint and varnish removers, including thinners.....	223.1	70.0	31.4	19.4	172.5	
	2001.....	239.2	61.2	25.6	17.2	195.2	
325510A141	Other miscellaneous allied paint products.....	524.2	134.6	25.7	67.7	457.3	
	2001.....	605.0	154.7	25.6	85.6	535.9	

1/Source: Census Bureau report EM 545, U. S. Exports.

2/Source: Census Bureau report IM 145, U. S. Imports for Consumption.

3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2002

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers.....	3208.10.0000	3208.10.0000
		3208.20.0000	3208.20.0000
		3208.90.0000	3208.90.0000
		3209.10.0000	3209.10.0000
		3209.90.0000	3209.90.0000
325510A111, A121	Paint and varnish removers, including thinners.....	3814.00.0000	3814.00.1000
			3814.00.2000
			3814.00.5010
			3814.00.5090
325510A141	Other miscellaneous allied paint products.....	3210.00.0000	3210.00.0000
		3211.00.0000	3211.00.0000
		3214.10.0020	3214.10.0020
		3214.10.0090	3214.10.0090

1/Source: 2002 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2002).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

Paint and Allied Products: 2003

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Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>.

Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2003, total manufacturers' estimated shipments of paint and

allied products amounted to \$18,080.7 million, an increase of 3.5 percent from the 2002 shipments of \$17,465.8 million. Shipments of architectural coatings increased 6.5 percent to \$8,104.5 million in 2003, from \$7,610.1 million in 2002. Shipments of OEM coatings amounted to \$5,561.5 million in 2003, virtually unchanged from the 2002 shipments' total of \$5,556.2 million. Shipments of special-purpose coatings increased 3.6 percent to \$3,267.9 million in 2003, from \$3,153.9 million in 2002. Shipments of miscellaneous allied paint products amounted to \$1,146.8 million in 2003, virtually unchanged from \$1,145.6 million in 2002.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Betty Sutter, 301-763-5164.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

U S C E N S U S B U R E A U

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Economics and Statistics Administration
U.S. CENSUS BUREAU

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Table 1. Summary of Estimated United States Total Quantity and Value of Shipments of Paint and Allied Products: 1998 to 2003
 [Quantity in millions of gallons. Value in millions of dollars]

Year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		Miscellaneous allied paint products	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2003.....	1,461.4	18,080.7	772.8	8,104.5	400.3	5,561.5	143.4	3,267.9	144.8	1,146.8
2002.....	1,434.0	17,465.8	709.8	r/	408.7	5,556.2	r/	3,153.9	143.2	1,145.6
2001.....	1,392.9	17,274.7	667.0	7,038.3	406.5	5,566.6	161.2	3,408.1	158.2	1,261.7
2000.....	1,467.2	17,724.7	650.6	6,461.4	453.4	6,149.2	182.4	3,607.0	180.8	1,507.1
1999.....	1,466.2	17,813.4	660.2	6,617.9	439.7	6,146.3	174.4	3,532.3	191.9	1,516.9
1998.....	1,443.7	17,298.2	631.6	6,115.2	428.3	6,098.2	173.3	3,472.0	210.5	1,612.8

r/Revised by 5 percent or more from previously published data.

Note: Data for 1998 through 2003 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in Table 2 by adjustment factors. For 2003 and 2002, these factors are: 0.984 for "Architectural coatings," 1.007 for "Product coatings OEM," 1.001 for "Special-purpose coatings," and 1.024 for "Miscellaneous paint products." For example, the quantity and value of OEM coatings for 2002 shown in Table 2 amounted to 405,858 and \$5,517,601, respectively. Adjusting these data by the factor of 1.007 (multiplying 405,858 and 5,517,601 by 1.007) equals the adjusted and rounded quantity and value of 408.7 and \$5,556.2 shown in Table 1. For 1998 to 2001, the adjustment factors are: 1.002 for "Architectural coatings," 0.993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510 formerly SIC 2851). The adjustment factors (based on the 2002 Economic Census, Manufactures Sector's relationships) bring each product class value up to 100 percent. Quarterly data for 2003 and 2002 reflect the adjusted totals in Table 1 and are shown in Table 3 along with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2003 and 2002
 [Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2003		2002	
		Quantity	Value	Quantity	Value
325510	Paint and allied products 1/.....	1,467,471	18,142,579	1,438,999	17,519,838
3255101	Architectural coatings.....	785,371	8,236,276	721,341 r/	7,733,817
3255101111	Exterior solvent-type.....	75,090	894,842	69,989	823,812
3255101115	Solvent thinned paints and tinting bases, including barn and roof paints.....	19,851	215,327	19,598	224,521
3255101111'	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels.....	16,168	242,058	11,039	151,149
3255101121	Solvent thinned undercoaters and primers.....	8,605	101,438	9,153	110,887
3255101125	Solvent thinned clear finishes and sealers.....	5,605	71,301	5,688 r/	73,546
3255101129	Solvent thinned stains, including shingle and shake.....	15,209	187,238	14,670	185,069
	Other exterior solvent thinned coatings, including bituminous paints.....	9,652	77,480	9,841	78,640
3255101131	Exterior water-type.....	191,283	2,090,506	182,043 r/	2,030,879
	Water thinned paints and tinting bases, including barn and roof paints.....	112,021	1,295,764	118,379 r/	1,386,192
3255101135	Water thinned exterior-interior deck and floor enamels.....	3,709	37,968	4,152	38,227
3255101139	Water thinned undercoaters and primers.....	24,881	266,758	13,747 r/	158,942
3255101141	Water thinned stains and sealers.....	21,923	255,148	16,877 r/	209,683
3255101145	Other exterior water thinned coatings.....	28,749	234,868	28,888 r/	237,835
3255101211	Interior solvent-type.....	58,944	649,369	48,987	579,272
	Flat solvent thinned wall paint and tinting bases, including mill white paints.....	2,617	63,703	6,287	98,103
3255101215	Gloss and quick drying enamels and other gloss solvent thinned paints and enamels.....	3,340	46,077 r/	3,933 r/	61,018
3255101219	Semigloss, eggshell, satin solvent thinned paints, and tinting bases.....	11,367	152,168	9,646	124,793
3255101221	Solvent thinned undercoaters and primers.....	24,866	218,575	11,589	119,259
3255101225	Solvent thinned clear finishes and sealers.....	(D)	(D)	(D) r/	97,342
3255101229	Solvent thinned stains.....	1,827	19,017	1,915	18,836
3255101231	Other interior solvent thinned coatings.....	(D)	(D)	(D) r/	59,921
3255101235	Interior water-type.....	451,325	4,511,511	412,530 r/	4,220,842
3255101239	Flat water thinned paints and tinting bases.....	181,385	1,498,850	162,287 r/	1,386,179
	Semigloss, eggshell, satin, and other water thinned paints and tinting bases.....	190,534	2,201,629	168,600 r/	1,998,600
3255101241	Water thinned undercoaters and primers.....	42,174	344,888	44,697 r/	383,472
3255101245	Other interior water thinned coatings, stains, and sealers.....	37,232	466,144	36,946	452,591
3255101249	Architectural lacquers.....	6,360	62,491	5,802	55,606
3255101YWV	Architectural coatings, n.s.k.	2,369	27,557	1,990	23,406
3255104	Product finishes for original equipment manufacturers (OEM), excluding marine coatings.....	397,537	5,522,821	405,858	5,517,601
3255104111	Automobile, light truck, van, and sport utility vehicle finishes....	45,584	978,019	47,899	1,068,361
3255104121	Automobile parts finishes.....	4,912	149,202	5,568	156,014
3255104131	Heavy duty truck, bus, and recreational vehicle finishes.....	12,055	290,228	12,155	295,420
3255104141	Other transportation equipment finishes, including aircraft and railroad.....	8,962	126,443 r/	7,807 r/	112,773
3255104211	Appliance, heating equipment, and air-conditioner finishes.....	7,979	87,167	7,333	86,397
3255104215	Wood furniture, cabinet, and fixture finishes.....	43,551	467,673	43,155	460,325
3255104219	Wood and composition board flat stock finishes.....	9,931	116,123	10,025	103,713
3255104221	Metal building product finishes, including coatings for aluminum extrusions and siding.....	35,968	548,307	35,720	541,547
3255104225	Container and closure finishes.....	35,332	442,459	43,335	452,817
3255104229	Machinery and equipment finishes, including road building equipment and farm implements.....	18,554	507,531	18,720	458,432
3255104231	Nonwood furniture and fixture finishes, including business equipment finishes.....	43,046	413,204	38,576	410,588
3255104235	Paper, paper board, film, and foil finishes, excluding pigment binders.....	14,570	126,555	14,237	119,883
3255104239	Electrical insulating coatings.....	4,007	25,689	4,422	31,905
	Powder coatings.....	72,110	799,572	74,076	764,618
3255104241	Appliance powder coatings 2/.....	10,837	182,976	11,889	165,869
3255104245	Automotive powder coatings 2/.....	9,128	108,519	8,545	103,690
3255104249	Architectural powder coatings (such as aluminum extrusions) 2/.....	1,428	20,179	2,060	19,403
3255104251	Lawn and garden powder coatings 2/.....	1,544	28,623 r/	1,944	23,194
3255104255	General metal finishing powder coatings 2/.....	19,418	307,534 r/	19,562	283,352

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2003 and 2002
[Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2003		2002	
		Quantity	Value	Quantity	Value
3255104259	Thermoset functional powder coatings (for pipe, rebar, electrical insulation, etc.) 2/.....	(D)	(D)	(D)	(D)
3255104261	Thermoplastic powder coatings (all) 2/.....	(D)	(D)	(D)	(D)
3255104265	Other industrial product finishes.....	37,939	410,816	38,366	399,066
3255104YWV	Product finishes for original equipment manufacturers (OEM), excluding marine coatings, n.s.k.	3,037	33,833	4,464	55,742
3255107	Special-purpose coatings, including all marine coatings.....	143,278	3,264,671	172,046	3,150,757
	Industrial new construction and maintenance paints (especially formulated coatings for special conditions of industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):				
3255107111	Interior.....	14,103	212,479	23,963	235,407
3255107115	Exterior.....	28,092	574,359	33,758	554,695
3255107121	Traffic marking paints (all types; shelf goods and highway department).....	29,364	218,619	40,003	242,950
3255107131	Automotive, other transportation and machinery refinish paints and enamels, including primers.....	49,525	1,867,618	45,838	1,631,523
3255107141	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and maintenance, excludes spar varnish.....	11,541	242,232	13,470	251,267
3255107151	Marine paints for yacht and pleasure craft, new construction, refinish, and maintenance.....	91	2,213	(D)	(D)
3255107161	Aerosol-paint concentrates produced for packaging in aerosol containers.....	9,742	134,367	(D)	(D)
3255107YWV	Special-purpose coatings, n.s.k.	820	12,784 r/	3,601 r/	52,494
325510B	Miscellaneous allied paint products.....	141,285	1,118,811	139,754	1,117,663
325510B111	Paint and varnish removers.....	5,075	53,956	6,138	59,508
325510B121	Thinner for lacquers and other solvent based paint products.....	27,112	145,927	30,911	152,180
325510B131	Pigment dispersions.....	28,569	392,679	25,211	386,519
325510B141	Other miscellaneous allied paint products, including brush cleaners, ink vehicles, putty and glazing compounds, etc.	78,508	474,064	76,806	487,597
325510BYWV	Miscellaneous allied paint products, n.s.k.	2,021	52,185 r/	688 r/	31,859

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind.
r/Revised by 5 percent or more from previously published data.

1/Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 1997 Economic Census, Manufacturing sector's final report.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon). Data collected in pounds amounted to 360,550 thousand pounds in 2003 and 370,380 thousand pounds in 2002.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2003 and 2002
 [Quantity in thousands of gallons. Value in thousands of dollars]

Quarter and year	As revised								
	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2003									
Total.....	1,316,546	16,933,912	772,805	8,104,495	400,319	5,561,481	143,422	3,267,936	
Fourth quarter.....	289,055	3,905,827	171,368	1,998,017	88,859	1,219,657	28,828	688,153	
Third quarter.....	343,702	4,374,730	208,985	2,171,757	93,535	1,297,508	41,182	905,465	
Second quarter.....	367,101	4,671,816	213,250	2,193,694	110,041	1,544,653	43,810	933,469	
First quarter.....	316,688	3,981,539	179,202	1,741,027	107,884	1,499,663	29,602	740,849	
2002									
Total.....	1,290,719	16,320,206	709,800	7,610,075	408,700	5,556,223	172,219	3,153,908	
Fourth quarter.....	292,578	3,665,702	155,582	1,635,803	102,628	1,364,868	34,368	665,031	
Third quarter.....	342,348	4,330,168	187,449	2,044,754	105,803	1,421,737	49,096	863,677	
Second quarter.....	359,591	4,525,685	201,558	2,175,269	105,803	1,450,752	52,230	899,664	
First quarter.....	296,202	3,798,651	165,211	1,754,249	94,466	1,318,866	36,525	725,536	
As published									
Quarter and year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2003									
Total.....	1,338,544	16,124,718	781,224	7,626,310	383,926	5,256,443	173,394	3,241,965	
Fourth quarter.....	293,307	3,715,574	173,235	1,880,129	85,220	1,152,761	34,852	682,684	
Third quarter.....	350,755	4,168,229	211,262	2,043,618	89,705	1,226,342	49,788	898,269	
Second quarter.....	374,074	4,450,243	215,573	2,064,261	105,535	1,459,931	52,966	926,051	
First quarter.....	320,408	3,790,672	181,154	1,638,302	103,466	1,417,409	35,788	734,961	
2002									
Total.....	1,313,696	16,022,757	718,664	7,123,083	412,038	5,548,184	182,994	3,351,490	
Fourth quarter.....	297,509	3,600,709	157,525	1,531,123	103,466	1,362,893	36,518	706,693	
Third quarter.....	348,625	4,251,368	189,790	1,913,904	106,667	1,419,680	52,168	917,784	
Second quarter.....	366,240	4,440,745	204,075	2,036,067	106,667	1,448,653	55,498	956,025	
First quarter.....	301,322	3,729,935	167,274	1,641,989	95,238	1,316,958	38,810	770,988	

See note at end of Table 1.

Table 4. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2003 and 2002
 [Quantity in millions of gallons. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Percent exports to manufacturers' shipments		Imports for consumption 2/		Apparent consumption 4/	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
3255101100, 4100, 7100	Paint, varnish, and lacquer.....	2003.....	1,316.5	16,933.9	(NA)	1,165.6	(NA)	6.9	(NA)	466.4	(NA)
		2002.....	1,290.7	16,320.2	(NA)	1,082.3	(NA)	6.6	(NA)	416.2	(NA)
325510B111, B121	Paint and varnish removers including thinners.....	2003.....	32.2	199.9	(NA)	70.6	(NA)	35.3	(NA)	19.0	(NA)
		2002.....	37.0	211.7	(NA)	70.0	(NA)	33.1	(NA)	19.4	(NA)
325510B141	Other miscellaneous allied paint products.....	2003.....	78.5	474.1	(NA)	131.8	(NA)	27.8	(NA)	65.3	(NA)
		2002.....	76.8	487.6	(NA)	134.6	(NA)	27.6	(NA)	67.7	(NA)

NA Not available.

1/Source: Census Bureau report EM 545, U. S. Exports.

2/Source: Census Bureau report IM 145, U. S. Imports for Consumption.

3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2003

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers.....	3208.10.0000	3208.10.0000
		3208.20.0000	3208.20.0000
		3208.90.0000	3208.90.0000
		3209.10.0000	3209.10.0000
		3209.90.0000	3209.90.0000
325510B111. B121	Paint and varnish removers, including thinners.....	3814.00.0000	3814.00.1000
			3814.00.2000
			3814.00.5010
			3814.00.5090
325510B141	Other miscellaneous allied paint products.....	3210.00.0000	3210.00.0000
		3211.00.0000	3211.00.0000
		3214.10.0020	3214.10.0020
		3214.10.0090	3214.10.0090

1/Source: 2003 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2003).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

Paint and Allied Products: 2004

Issued September 2005

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Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector," then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (XLS format to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2004, total manufacturers' estimated shipments of paint and

allied products amounted to \$19,456.9 million, an increase of 7.5 percent from the 2003 shipments of \$18,092.0 million. Shipments of architectural coatings increased 7.8 percent to \$8,627.8 million in 2004, from \$8,008.2 million in 2003. Shipments of OEM coatings amounted to \$5,937.2 million in 2004, an increase of 7.1 percent, from the 2003 shipments' total of \$5,541.4 million. Shipments of special-purpose coatings increased 9.5 percent to \$3,638.9 million in 2004, from \$3,369.0 million in 2003. Shipments of miscellaneous allied paint products amounted to \$1,202.9 million in 2004, an increase of 2.3 percent, from \$1,175.3 million in 2003.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6900 or call Betty Sutler, 301-763-5164.
For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

U S C E N S U S B U R E A U

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Economics and Statistics Administration
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Table 1. Summary of Estimated United States Total Quantity and Value of Shipments of Paint and Allied Products: 1999 to 2004
 {Quantity in millions of gallons. Value in millions of dollars}

Year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		Miscellaneous allied paint products	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2004.....	1,564.3	19,456.9	809.0	8,627.8	427.8	5,937.2	173.3	3,688.9	154.2	1,202.9
2003.....	1,473.5	18,092.0	762.0	8,006.2	398.5	5,541.4	r/	165.1	3,369.0	148.0
2002.....	1,433.9	17,465.8	709.8	7,610.1	408.7	5,556.2	172.2	3,153.9	143.2	1,145.6
2001.....	1,392.9	17,274.7	667.0	7,038.3	406.5	5,566.6	161.2	3,408.1	158.2	1,261.7
2000.....	1,467.2	17,724.7	650.6	6,461.4	453.4	6,149.2	182.4	3,607.0	180.8	1,507.1
1999.....	1,466.2	17,813.4	660.2	6,617.9	439.7	6,146.3	174.4	3,532.3	191.9	1,516.9

r/Revised by 5 percent or more from previously published data.

Note: Data for 1999 through 2004 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in Table 2 by adjustment factors. For 2002 through 2004 these factors are: 0.984 for "Architectural coatings," 1.007 for "Product coatings OEM," 1.001 for "Special-purpose coatings," and 1.024 for "Miscellaneous allied paint products." For example, the quantity and value of OEM coatings for 2003 shown in Table 2 amounted to 395,688 and \$5,502,922 respectively. Adjusting these data by the factor of 1.007 (multiplying 395,688 and 5,502,922 by 1.007) equals the adjusted and rounded quantity and value of 398.5 and \$5,541.4 shown in Table 1. For 1999 to 2001, the adjustment factors are: 1.002 for "Architectural coatings," 0.993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous allied paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510 formerly SIC 2851). The adjustment factors (based on the 2002 Economic Census, Manufacturing Sector's relationships) bring each product class value up to 100 percent. Quarterly data for 2004 and 2003 reflect the adjusted totals in Table 1 and are shown in Table 3 along with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2004 and 2003
 [Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2004		2003	
		Quantity	Value	Quantity	Value
325510	Paint and allied products 1/.....	1,570,689	19,524,029	1,479,504	18,152,769
3255101	Architectural coatings.....	822,186	8,768,106	774,364	8,136,396
3255101111	Exterior solvent-type.....	81,554	965,299	74,979	892,875
3255101115	Solvent thinned paints and tinting bases, including barn and roof paints.....	22,359	242,002	19,867	215,109
3255101119	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels.....	16,774	248,554	16,186	241,535
3255101121	Solvent thinned undercoaters and primers.....	10,331	117,248	8,528	100,539
3255101125	Solvent thinned clear finishes and sealers.....	5,894	76,248	5,590	71,125
3255101129	Solvent thinned stains, including shingle and shake.....	15,992	199,979	15,134	187,009
	Other exterior solvent thinned coatings, including bituminous paints.....	10,204	81,268	9,674	77,558
3255101131	Exterior water-type.....	202,668	2,248,599	186,403	2,037,304
	Water thinned paints and tinting bases, including barn and roof paints.....	121,800	1,414,222	107,434	1,245,124
3255101135	Water thinned exterior-interior deck and floor enamels.....	3,741	39,236	3,616	37,235
3255101139	Water thinned undercoaters and primers.....	27,720	294,460	24,749	265,081
3255101141	Water thinned stains and sealers.....	22,337	266,971	21,961	255,813
3255101145	Other exterior water thinned coatings.....	27,070	233,710	28,643	234,051
3255101211	Interior solvent-type.....	65,778	747,328	60,369	660,705
	Flat solvent thinned wall paint and tinting bases, including mill white paints.....	2,848	71,775 r/	2,423	61,974
3255101215	Gloss and quick drying enamels and other gloss solvent thinned paints and enamels.....	3,312	47,245	3,333	46,443
3255101219	Semigloss, eggshell, satin solvent thinned paints, and tinting bases.....	13,874	181,452	11,403	153,248
3255101221	Solvent thinned undercoaters and primers.....	27,746	263,136 r/	26,314	229,490
3255101225	Solvent thinned clear finishes and sealers.....	(D)	(D)	(D)	(D)
3255101229	Solvent thinned stains.....	1,820	19,131	1,839	19,026
3255101231	Other interior solvent thinned coatings.....	(D)	(D)	(D)	(D)
3255101235	Interior water-type.....	463,459	4,715,546	443,884	4,455,464
3255101239	Flat water thinned paints and tinting bases.....	181,230	1,550,792	177,437	1,471,464
	Semigloss, eggshell, satin, and other water thinned paints and tinting bases.....	197,333	2,270,731	188,003	2,178,169
3255101241	Water thinned undercoaters and primers.....	46,008	387,705	40,912	334,883
3255101245	Other interior water thinned coatings, stains, and sealers.....	38,888	506,318	37,532	470,948
3255101249	Architectural lacquers.....	6,286	63,012	6,360	62,491
3255101YWV	Architectural coatings, n.s.k.	2,441	28,322	2,369	27,557
3255104	Product finishes for original equipment manufacturers (OEM), excluding marine coatings.....	424,812	5,895,952	395,688	5,502,922
3255104111	Automobile, light truck, van, and sport utility vehicle finishes.....	49,789	987,604	45,625	978,714
3255104121	Automobile parts finishes.....	4,953	148,451	4,855	148,952
3255104131	Heavy duty truck, bus, and recreational vehicle finishes.....	15,652	375,266	12,055	290,232
3255104141	Other transportation equipment finishes, including aircraft and railroad.....	8,676	130,839	8,995	126,938
3255104211	Appliance, heating equipment, and air-conditioner finishes.....	8,881	95,158	7,995	87,472
3255104215	Wood furniture, cabinet, and fixture finishes.....	44,649	507,612	42,468	461,370
3255104219	Wood and composition board flat stock finishes.....	11,830	124,369	9,932	116,141
3255104221	Metal building product finishes, including coatings for aluminum extrusions and siding.....	38,575	689,254	35,909	547,649
3255104225	Container and closure finishes.....	38,643	416,571	34,195	442,759
3255104229	Machinery and equipment finishes, including road building equipment and farm implements.....	22,611	533,037	18,217	507,956
3255104231	Nonwood furniture and fixture finishes, including business equipment finishes.....	44,261	463,767	41,859	402,160
3255104235	Paper, paper board, film, and foil finishes, excluding pigment binders.....	15,995	130,806	14,007	124,203
3255104239	Electrical insulating coatings.....	920	16,295	4,015	25,840
	Powder coatings.....	73,946	829,176	72,404	798,264
3255104241	Appliance powder coatings 2/.....	9,763	173,818	10,837	182,976
3255104245	Automotive powder coatings 2/.....	5,714	97,479	9,024	106,886
3255104249	Architectural powder coatings (such as aluminum extrusions) 2/.....	1,808	20,053 r/	1,827	20,684
3255104251	Lawn and garden powder coatings 2/.....	1,799	33,129	1,544	28,624
3255104255	General metal finishing powder coatings 2/.....	21,491	349,893	19,417	307,334
3255104259	Thermoset functional powder coatings (for pipe, rebar, electrical insulation, etc.) 2/.....	(D)	(D)	(D)	(D)

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2004 and 2003
 [Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2004		2003	
		Quantity	Value	Quantity	Value
3255104261	Thermoplastic powder coatings (all) 2/.....	(D)	(D)	(D)	(D)
3255104265	Other industrial product finishes.....	40,318	415,354	38,117	410,439
3255104YWV	Product finishes for original equipment manufacturers (OEM), excluding marine coatings, n.s.k.	3,109	32,393	3,037	33,833
3255107	Special-purpose coatings, including all marine coatings..... Industrial new construction and maintenance paints (especially formulated coatings for special conditions of industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):	173,087	3,685,255 r/	164,930	3,365,680
3255107111	Interior.....	22,492	271,264 r/	24,510 r/	258,786
3255107115	Exterior.....	35,167	640,447 r/	34,999	596,030
3255107121	Traffic marking paints (all types; shelf goods and highway department).....	35,907	245,730 r/	32,217	226,367
3255107131	Automotive, other transportation and machinery refinish paints and enamels, including primers.....	54,473	2,114,375	50,763	1,880,518
3255107141	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and maintenance, excludes spar varnish.....	12,342	246,723	11,557	242,582
3255107151	Marine paints for yacht and pleasure craft, new construction, refinish, and maintenance.....	100	2,238	91	2,214
3255107161	Aerosol-paint concentrates produced for packaging in aerosol containers.....	11,728	144,250	9,608	133,521
3255107YWV	Special-purpose coatings, n.s.k.	878	20,228 r/	1,185 r/	25,662
325510B	Miscellaneous allied paint products.....	150,604	1,174,716	144,522	1,147,771
325510B111	Paint and varnish removers.....	5,329	58,193	5,067	53,756
325510B121	Thinner for lacquers and other solvent based paint products.....	32,586	170,739	26,929	144,942
325510B131	Pigment dispersions.....	31,748	464,943 r/	30,185 r/	439,689
325510B141	Other miscellaneous allied paint products, including brush cleaners, ink vehicles, putty and glazing compounds, etc.	80,521	456,833	81,970	484,674
325510BYWV	Miscellaneous allied paint products, n.s.k.	420	24,008 r/	371 r/	24,710

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind.
 r/ Revised by 5 percent or more from previously published data.

1/Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 2002 Economic Census, Manufacturing sector's final report.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon). Data collected in pounds amounted to 369,730 thousand pounds in 2004 and 362,020 thousand pounds in 2003.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2004 and 2003
 [Quantity in thousands of gallons. Value in thousands of dollars]

Quarter and year	As revised							
	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2004								
Total.....	1,410,076	18,253,979	809,031	8,627,816	427,785	5,937,223	173,260	3,688,940
Fourth quarter.....	315,102	4,104,679	179,157	1,930,426	100,698	1,413,043	35,247	761,210
Third quarter.....	373,757	4,843,184	218,483	2,354,178	108,278	1,487,414	46,996	1,001,592
Second quarter.....	389,747	5,000,062	225,241	2,377,958	110,488	1,533,417	54,018	1,088,687
First quarter.....	331,470	4,306,054	186,150	1,965,254	108,321	1,503,349	36,999	837,451
2003								
Total.....	1,325,526	16,916,701	761,975	8,006,214	398,457	5,541,442	165,094	3,369,045
Fourth quarter.....	285,746	3,680,762	164,116	1,756,056	88,446	1,215,262	33,184	709,444
Third quarter.....	348,247	4,449,169	207,742	2,222,856	93,100	1,292,833	47,405	933,480
Second quarter.....	371,940	4,746,747	211,981	2,245,310	109,529	1,539,087	50,430	962,350
First quarter.....	319,593	4,040,023	178,136	1,781,992	107,382	1,494,260	34,075	763,771
As published								
Quarter and year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2004								
Total.....	1,323,620	17,029,652	817,450	8,662,481	368,471	5,154,007	137,699	3,213,164
Fourth quarter.....	295,770	3,827,856	181,021	1,938,182	86,736	1,226,640	28,013	663,034
Third quarter.....	351,372	4,527,250	220,757	2,363,637	93,265	1,291,200	37,350	872,413
Second quarter.....	365,684	4,666,921	227,585	2,387,512	95,168	1,331,134	42,931	948,275
First quarter.....	310,794	4,007,625	188,087	1,973,150	93,302	1,305,033	29,405	729,442
2003								
Total.....	1,316,547	16,933,913	772,806	8,104,496	400,319	5,561,481	143,422	3,267,936
Fourth quarter.....	284,136	3,685,423	166,449	1,777,613	88,859	1,219,657	28,828	688,153
Third quarter.....	345,412	4,453,116	210,695	2,250,143	93,535	1,297,508	41,182	905,465
Second quarter.....	368,845	4,750,995	214,994	2,272,873	110,041	1,544,653	43,810	933,469
First quarter.....	318,154	4,044,379	180,668	1,803,867	107,884	1,499,663	29,602	740,849

See note at end of Table 1.

Table 4. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2004 and 2003
 [Quantity in millions of gallons. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Percent exports to manufacturers' shipments		Imports for consumption 2/		Apparent consumption 4/		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value 3/	Quantity	Value	
3255101100, 4100, 7100	Paint, varnish, and lacquer.....	2004.....	1,410.1	18,254.0	(NA)	1,209.1	(NA)	6.6	(NA)	499.0	(NA)	17,543.9
		2003.....	1,325.5	16,916.7	(NA)	1,165.6	(NA)	6.9	(NA)	466.4	(NA)	16,217.5
325510B111, B121	Paint and varnish removers, including thinners.....	2004.....	37.9	228.9	(NA)	77.3	(NA)	33.8	(NA)	20.1	(NA)	171.7
		2003.....	32.0	198.7	(NA)	70.6	(NA)	35.5	(NA)	19.0	(NA)	147.1
325510B141	Other miscellaneous allied paint products.....	2004.....	80.5	456.8	(NA)	154.4	(NA)	33.8	(NA)	80.3	(NA)	382.7
		2003.....	82.0	484.7	(NA)	131.8	(NA)	27.2	(NA)	65.3	(NA)	418.2

NA Not available.

1/Source: Census Bureau report EM 545, U. S. Exports.

2/Source: Census Bureau report IM 145, U. S. Imports for Consumption.

3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2004

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers.....	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000
325510B111, B121	Paint and varnish removers, including thinners.....	3814.00.0000	3814.00.1000 3814.00.2000 3814.00.5010 3814.00.5090
325510B141	Other miscellaneous allied paint products.....	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090

1/Source: 2004 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2004).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

Paints and Allied Products: 2005

Issued June 2006

MA325F(05)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: <http://www.census.gov/mcd/>. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector," then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (XLS format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2005, total manufacturers' estimated shipments of paint and

allied products amounted to \$19,868.1 million, an increase of 3.3 percent from the 2004 shipments of \$19,233.2 million. Shipments of architectural coatings increased 3.4 percent to \$8,916.0 million in 2005, from \$8,623.3 million in 2004. Shipments of OEM coatings amounted to \$5,986.3 million in 2005, an increase of 2.0 percent, from the 2004 shipments' total of \$5,867.3 million. Shipments of special-purpose coatings increased 3.1 percent to \$3,635.4 million in 2005, from \$3,525.8 million in 2004. Shipments of miscellaneous allied paint products amounted to \$1,330.4 million in 2005, an increase of 9.3 percent, from the \$1,216.7 million in 2004.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6900 or call Betty Sutter, 301-763-5164.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

U S C E N S U S B U R E A U

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Economics and Statistics Administration
U.S. CENSUS BUREAU

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Table 1. Summary of Estimated United States Total Quantity and Value of Shipments of Paint and Allied Products: 2000-2005
 [Quantity in millions of gallons. Value in millions of dollars]

Year	Total	Architectural coatings		Product coatings OEM		Special-purpose coatings		Miscellaneous allied paint products		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2005.....	1,529.8	19,868.1	794.5	8,916.0	401.5	5,986.3	155.8	3,635.4	178.0	1,330.4
2004.....	1,534.3	19,233.2	803.6	8,623.3	404.2	5,867.3	154.5	3,525.8	171.9	1,216.7
2003.....	1,473.5	18,092.0	762.0	8,006.2	398.5	5,541.4	165.1	3,369.0	148.0	1,175.3
2002.....	1,433.9	17,465.8	709.8	7,610.1	408.7	5,556.2	172.2	3,153.9	143.2	1,145.6
2001.....	1,392.9	17,274.7	667.0	7,038.3	406.5	5,566.6	161.2	3,408.1	158.2	1,261.7
2000.....	1,467.2	17,724.7	650.6	6,461.4	453.4	6,149.2	182.4	3,607.0	180.8	1,507.1

r/Revised by 5 percent or more from previously published data.

Note: Data for 2000 through 2005 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in Table 2 by adjustment factors. For 2002 through 2005 these factors are: 0.984 for "Architectural coatings," 1.007 for "Product coatings OEM," 1.001 for "Special-purpose coatings," and 1.024 for "Miscellaneous allied paint products." For example, the quantity and value of OEM coatings for 2004 shown in Table 2 amounted to 401,438 and \$5,826,536 respectively. Adjusting these data by the factor of 1.007 (multiplying 401,438 and 5,826,536 by 1.007) equals the adjusted and rounded quantity and value of 404.2 and \$5,867.3 shown in Table 1. For 2000 to 2001, the adjustment factors are: 1.002 for "Architectural coatings," 0.993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous allied paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510 former SIC 2851). The adjustment factors (based on the 2002 Economic Census, Manufacturing Sector's relationships) bring each product class value up to 100 percent. Quarterly data for 2005 and 2004 reflect the adjusted totals in Table 1 and are shown in Table 3 alone with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2005 and 2004
 [Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2005		2004	
		Quantity	Value	Quantity	Value
325510	Paint and allied products 1/.....	1,535,551	19,936,631	1,540,383	19,300,551
3255101	Architectural coatings.....	807,395	9,060,961	816,668	8,763,513
3255101111	Exterior solvent-type.....	80,161	987,345	80,084	959,857
3255101115	Solvent thinned paints and tinting bases, including barn and roof paints.....	23,706	257,408	22,197	240,654
3255101119	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels.....	15,040	239,126	16,367	243,464
3255101121	Solvent thinned undercoaters and primers.....	10,159	120,862	10,293	122,244
3255101125	Solvent thinned clear finishes and sealers.....	5,649	77,582	5,712	73,652
3255101129	Solvent thinned stains, including shingle and shake.....	15,419	203,923	15,529	199,301
3255101131	Other exterior solvent thinned coatings, including bituminous paints.....	10,188	88,444	9,986	80,542
3255101135	Exterior water-type.....	199,327	2,328,844	201,600	2,238,371
3255101139	Water thinned paints and tinting bases, including barn and roof paints.....	117,927	1,418,266	121,358	1,409,008
3255101141	Water thinned exterior-interior deck and floor enamels.....	4,101	42,715	3,742	39,247
3255101145	Water thinned undercoaters and primers.....	28,051	310,902	27,665	293,220
3255101211	Water thinned stains and sealers.....	22,890	288,195	22,305	266,552
3255101215	Other exterior water thinned coatings.....	26,358	268,766	26,530	230,344
3255101219	Interior solvent-type.....	58,827	729,275	64,040	736,543
3255101221	Flat solvent thinned wall paint and tinting bases, including mill white paints.....	2,623	73,138	r/	2,683
3255101225	Gloss and quick drying enamels and other gloss solvent thinned paints and enamels.....	3,777	54,056	3,413	48,629
3255101229	Semigloss, eggshell, satin solvent thinned paints, and tinting bases.....	13,130	183,647	13,813	180,926
3255101231	Solvent thinned undercoaters and primers.....	22,761	234,292	27,405	262,249
3255101235	Solvent thinned clear finishes and sealers.....	(D)	(D)	(D)	(D)
3255101239	Solvent thinned stains.....	1,368	17,578	r/	1,470
3255101241	Other interior solvent thinned coatings.....	(D)	(D)	(D)	(D)
3255101245	Interior water-type.....	460,121	4,916,755	462,203	4,742,695
3255101249	Flat water thinned paints and tinting bases.....	181,837	1,584,349	181,060	1,549,590
3255101YVV	Semigloss, eggshell, satin, and other water thinned paints and tinting bases.....	203,305	2,451,007	197,272	2,306,298
325510241	Water thinned undercoaters and primers.....	35,537	299,157	45,975	387,292
325510245	Other interior water thinned coatings, stains, and sealers.....	39,442	582,242	37,896	499,515
325510249	Architectural lacquers.....	6,936	73,344	6,301	63,170
3255104	Architectural coatings, n.s.k.	2,023	25,398	2,440	r/ 22,877
3255104111	Product finishes for original equipment manufacturers (OEM), excluding marine coatings.....	398,673	5,944,726	r/	401,438
3255104121	Automobile, light truck, van, and sport utility vehicle finishes.....	54,521	1,140,024	r/	55,682
3255104131	Automobile parts finishes.....	5,959	198,532	r/	6,814
3255104141	Heavy duty truck, bus, and recreational vehicle finishes.....	7,554	200,291	r/	7,020
3255104211	Other transportation equipment finishes, including aircraft and railroad.....	9,552	156,077	r/	8,091
3255104215	Appliance, heating equipment, and air-conditioner finishes.....	8,255	94,017	r/	8,294
3255104219	Wood furniture, cabinet, and fixture finishes.....	49,231	590,472		44,921
3255104221	Wood and composition board flat stock finishes.....	11,304	132,197		11,976
3255104225	Metal building product finishes, including coatings for aluminum extrusions and siding.....	32,502	608,627	r/	33,549
3255104229	Container and closure finishes.....	35,043	462,090	r/	34,746
3255104231	Machinery and equipment finishes, including road building equipment and farm implements.....	20,229	526,367	r/	20,638
3255104235	Nonwood furniture and fixture finishes, including business equipment finishes.....	49,174	525,670		43,807
3255104239	Paper, paper board, film, and foil finishes, excluding pigment binders.....	14,752	134,762		15,545
3255104241	Electrical insulating coatings.....	423	14,693		921
3255104245	Powder coatings.....	64,773	746,175	r/	68,831
3255104249	Appliance powder coatings 2/.....	7,905	167,027	r/	8,499
3255104251	Automotive powder coatings 2/.....	3,199	66,015	r/	4,093
3255104255	Architectural powder coatings (such as aluminum extrusions) 2/.....	1,558	18,145		1,766
3255104259	Lawn and garden powder coatings 2/.....	1,557	29,681		1,752
3255104255	General metal finishing powder coatings 2/.....	19,357	309,712	r/	19,444
3255104259	Thermoset functional powder coatings (for pipe, rebar, electrical insulation, etc.) 2/.....	(D)	(D)		(D)

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2005 and 2004
 [Quantity in thousand of gallons. Value in thousand of dollars]

Product code	Product description	2005		2004	
		Quantity	Value	Quantity	Value
3255104261	Thermoplastic powder coatings (all) 2/.....	(D)	89,803	(D)	(D)
3255104263	Other powder coatings.....	(D)	(D)	(D)	(D)
3255104265	Other industrial product finishes.....	34,089	392,444	r/	37,708
3255104YWV	Product finishes for original equipment manufacturers (OEM), excluding marine coatings, n.s.k.	1,312	22,288	r/	2,895
3255107	Special-purpose coatings, including all marine coatings..... Industrial new construction and maintenance paints (especially formulated coatings for special conditions of industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):	155,629	3,631,741	r/	154,376
3255107111	Interior.....	16,416	265,574	r/	14,858
3255107115	Exterior.....	30,161	658,463	r/	29,650
3255107121	Traffic marking paints (all types; shelf goods and highway department).....	30,799	238,700	r/	29,189
3255107131	Automotive, other transportation and machinery refinish paints and enamels, including primers.....	54,139	2,015,606		55,904
3255107141	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and maintenance, excludes spar varnish.....	12,510	253,929		12,342
3255107151	Marine paints for yacht and pleasure craft, new construction, refinish, and maintenance.....	83	2,077		100
3255107161	Aerosol-paint concentrates produced for packaging in aerosol containers.....	10,298	151,877		11,721
3255107YWV	Special-purpose coatings, n.s.k.	1,223	45,515	r/	612
325510B	Miscellaneous allied paint products.....	173,854	1,299,203	r/	167,901
325510B111	Paint and varnish removers.....	7,373	52,975	r/	8,264
325510B121	Thinners for lacquers and other solvent based paint products.....	38,481	190,320	r/	40,646
325510B131	Pigment dispersions.....	34,481	507,710		31,313
325510B141	Other miscellaneous allied paint products, including brush cleaners, ink vehicles, putty and glazing compounds, etc.	93,102	525,444	r/	87,258
325510BYWV	Miscellaneous allied paint products, n.s.k.	417	22,754		420
					24,008

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind.
 r/Revised by 5 percent or more from previously published data.

1/Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 2002 Economic Census, Manufacturing sector's final report.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon). Data collected in pounds amounted to 323,865 thousand pounds in 2005 and 344,155 thousand pounds in 2004.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2005 and 2004
 [Quantity in thousands of gallons. Value in thousands of dollars]

Quarter and year		As revised							
		Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
				Quantity	Value	Quantity	Value	Quantity	Value
2005									
Total.....	1,351,724	18,537,698	794,476	8,915,986	401,463	5,986,339	155,785	3,635,373	
Fourth quarter.....	306,998	4,249,537	174,237	1,938,121	98,687	1,484,522	34,074	826,894	
Third quarter.....	357,356	4,951,652	212,485	2,392,741	101,740	1,562,654	43,131	996,257	
Second quarter.....	387,991	5,274,808	233,500	2,658,601	107,094	1,578,439	47,397	1,037,768	
First quarter.....	299,379	4,061,701	174,254	1,926,523	93,942	1,360,724	31,183	774,454	
2004									
Total.....	1,362,380	18,016,455	803,602	8,623,297	404,247	5,867,321	154,531	3,525,837	
Fourth quarter.....	304,549	4,053,376	177,955	1,929,415	95,157	1,396,407	31,437	727,554	
Third quarter.....	361,253	4,780,154	217,017	2,352,945	102,320	1,469,902	41,916	957,307	
Second quarter.....	376,317	4,932,627	223,729	2,376,712	104,409	1,515,363	48,179	1,040,552	
First quarter.....	320,261	4,250,298	184,901	1,964,225	102,361	1,485,649	32,999	800,424	
As published									
Quarter and year		Total		Architectural coatings		Product coatings OEM		Special-purpose coatings	
				Quantity	Value	Quantity	Value	Quantity	Value
				Quantity	Value	Quantity	Value	Quantity	Value
2005									
Total.....	1,445,125	19,472,717	857,673	9,291,411	413,121	6,465,174	174,331	3,716,132	
Fourth quarter.....	327,780	4,468,258	188,097	2,019,729	101,553	1,603,266	38,130	845,263	
Third quarter.....	382,347	5,199,529	229,387	2,493,492	104,694	1,687,648	48,266	1,018,389	
Second quarter.....	415,318	5,536,064	252,074	2,770,547	110,204	1,704,695	53,040	1,060,822	
First quarter.....	319,680	4,268,866	188,115	2,007,643	96,670	1,469,565	34,895	791,658	
2004									
Total.....	1,410,076	18,253,979	809,031	8,627,816	427,785	5,937,223	173,260	3,688,940	
Fourth quarter.....	315,102	4,104,679	179,157	1,930,426	100,698	1,413,043	35,247	761,210	
Third quarter.....	373,757	4,843,184	218,483	2,354,178	108,278	1,487,414	46,996	1,001,592	
Second quarter.....	389,747	5,000,062	225,241	2,377,958	110,488	1,533,417	54,018	1,088,687	
First quarter.....	331,470	4,306,054	186,150	1,965,254	108,321	1,503,349	36,999	837,451	

See note at end of Table 1.

Table 4. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2005 and 2004
 [Quantity in millions of gallons. Value in millions of dollars]

Product code	Product description	Manufactures' shipments		Exports of domestic merchandise 1/		Percent exports to manufacturers' shipments		Imports for consumption 2/		Apparent consumption 4/		
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value 3/	Quantity	Value	
3255101100, 4100, 7100	Paint, varnish, and lacquer.....	2005.... 2004....	1,351.7 1,362.4	18,537.7 18,016.5	(NA) (NA)	1,338.1 1,209.1	(NA) (NA)	7.4 7.1	(NA) (NA)	547.2 499.0	(NA) (NA)	17,225.6 16,206.5
325510B111, B121	Paint and varnish removers, including thinners.....	2005.... 2004.... r/	45.9 48.9	243.3 228.9	(NA) (NA)	89.3 77.3	(NA) (NA)	36.7 33.8	(NA) (NA)	21.2 20.1	(NA) (NA)	175.2 171.7
325510B141	Other miscellaneous allied paint products.....	2005.... 2004.... r/	93.1 87.3	525.4 476.9	(NA) (NA)	176.7 154.4	(NA) (NA)	33.6 32.4	(NA) (NA)	85.6 80.3	(NA) (NA)	434.3 402.8

NA Not available. r/Revised by 5 percent or more from previously published data.

1/Source: Census Bureau report EM 545, U. S. Exports.

2/Source: Census Bureau report IM 145, U. S. Imports for Consumption.

3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes and HTSUSA Import Codes: 2005

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers.....	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000
325510B111, B121	Paint and varnish removers, including thinners.....	3814.00.0000 3814.00.2000 3814.00.5010 3814.00.5090	3814.00.1000 3814.00.2000 3814.00.5010 3814.00.5090
325510B141	Other miscellaneous allied paint products.....	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090

1/Source: 2005 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2005).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

**Exhibit 6: Advertising and sales aids expenses, Textured Coatings of America, Inc.,
2000-2006.**

Textured Coatings of America, Inc.

Advertising Cost Analysis

2000 - 2006

	PROJECTED						
	2006	2005	2004	2003	2002	2001	2000
Advertising - General	1,168.00	-	21,151.24	13,507.87	3,863.65	-	9,846.55
General Advertising - Commercial	11,283.56	15,509.81	12,471.31	16,495.92	17,779.47	35,166.63	40,486.66
General Advertising - Home Imp.	11,283.56	15,509.79	12,338.81	18,491.95	41,234.39	32,519.40	38,963.06
Total General Advertising	<u>23,735.12</u>	<u>31,019.60</u>	<u>45,961.36</u>	<u>48,495.74</u>	<u>62,877.51</u>	<u>67,686.03</u>	<u>89,296.27</u>
Sales Aids - General	41,328.94	16,960.94	27,510.43	11,259.80	14,069.36	1,274.00	-
Sales Aids Commercial	92,556.56	76,114.84	98,346.99	76,490.10	30,956.61	46,122.50	28,181.55
Sales Aids - Home Improvement	58,058.78	65,709.04	166,478.51	122,615.13	83,827.06	81,891.25	80,555.02
Total Sales Aids	<u>191,944.28</u>	<u>158,784.82</u>	<u>292,335.93</u>	<u>210,365.03</u>	<u>128,853.03</u>	<u>129,287.75</u>	<u>108,736.57</u>
Total Advertising and Sales Aids	<u>215,679.40</u>	<u>189,804.42</u>	<u>338,297.29</u>	<u>258,860.77</u>	<u>191,730.54</u>	<u>196,973.78</u>	<u>198,032.84</u>